Built Environment

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Built Environment Defined

When we think about the word "environment," we often think about Nature – the birds, the bees, the mountains, the lakes, the flowers, and the trees. Indeed, environmental protection focuses on keeping our air, land, and water clean and healthy. Connections between public health and the built environment in which we live, work, and play are now becoming better understood. These next paragraphs will provide a better understanding of what exactly is meant by the "built environment" and provide some resources to help us all live healthier lives.

As with most environmental issues, the choices that we make can have a significant positive or negative effect. It is the evaluation of these choices that has developed into our understanding of the built environment. For example, if we choose to drive an automobile everywhere, then we will incur a financial cost for fuel and upkeep. There is an environmental cost to harvesting the raw materials such as the iron, rubber, and oil needed to construct the car. There is also the air pollution that is generated from operating the combustion engine. These auto emissions are being released into the same air that we must breathe. Riding in a car prevents getting physical exercise that is part of a healthy lifestyle. The choices we make today and the plans we have for tomorrow all effect our built environment and thus influence our health.



Planning for Sustainability

Planning for a healthy lifestyle and a healthy environment is the foundation of a healthy built environment. In days long gone, physical activity was part of daily routines. There were no cars, walking from place to place was the norm. There were fields to plant and harvest. There was even a time when televisions did not have remote control and a person would have to physically get up from the couch to change the channel. Modern on-the-go lifestyles, while they sound like constant motion, have draw backs such as

sitting behind computers and driving thru fast food restaurants. Planning for the built environment combines the needs of every day life, with the benefits of physical activity and with an understanding of the impact to the natural environment. Building a clean and healthy environment includes ideas such as urban planning, eco-friendly products, and energy efficiency.

Urban Planning

Making it easy for people to incorporate physical activity into their daily routines is one of the many benefits of urban planning. Building neighborhoods with sidewalks, streets with bicycle lanes, and communities with interconnected greenways are just some of the ways that people are able to add physical activity into their daily routines. Kids can walk to school, employees can bike to work, and families can spend quality time walking, biking, skating, walking the dog, etc.

Other benefits include minimizing the amount of land needed for human living and thus allowing for the preservation of wilderness areas. Creating green space within urban cores helps to ease the concrete jungle feel. Providing opportunities to live, work, and play in close proximity reduces the dependence on automobiles and the pollution they create. It is perhaps these benefits that have brought urban planning into the environmental arena which was typically dominated by natural resource preservation and protection.

Green Products

Eco-friendly products are readily available in today's marketplace. Organic foods that have been grown without the use of chemical pesticides or hormone supplements are available in most grocery stores and many specialty shops. Products harvested from sustainable natural resources such as Christmas trees, construction lumber, and cotton clothing are available. Many products are now made from would-be waste materials. Have you ever heard the expression, "One person's trash is another person's treasure?" Available recycled-content products include road asphalt, playground equipment, patio decking, and fabric. The office workplace has many green product choices including recycled-content paper, refillable ink cartridges, and reusable envelopes. Just think how much paper – how many trees – the use of electronic communications has saved. You can protect your family by purchasing household cleaning products that are made from natural ingredients and not harsh chemicals. Furthermore, there are many new construction techniques that can turn your house into an environmentally friendly home. Many builders now have raw materials that are environmentally better than traditional building materials. Consider using natural compost in landscaping instead of milled wood mulch. When making home improvements, "Think Green."

Energy Efficient Products

Just watching television commercials, you probably have seen several examples of energy efficient products such as cars, household appliances, and solar panels. Common fuels like gasoline, diesel, coal, and nuclear energy generate waste products. Improving energy efficiency helps minimize the amount of waste created while providing the operator cost savings in reduced fuel. With recent increases in the cost of fuel, energy efficiency cost savings are really getting noticed. Consider purchasing an energy efficient product in the future.

In the automotive world, fuel efficiency, or how often you need to fill the gas tank, is a constant topic of conversation. Recently, new innovations have helped to reduce fuel need and therefore demand on natural resources. E85 is a fuel blend that uses ethanol, a

corn product, for fuel. Ethanol is a renewable resource, and its use as a fuel can lower emissions. Several automobile manufacturers' engines can run on ethanol which often costs less per gallon than gasoline. Perhaps even more popular, are hybrid gas-electric engines. These engines use energy from operating the car to recharge a battery. The hybrid combustion and battery-powered engine combines for greater fuel efficiency and reduced tailpipe emissions.





The US Environmental Protection Agency and US Department of Energy have developed the Energy Star program to certify products that use considerably less energy than average models. The Energy Star label is proudly displayed on many electrical products - from washing machines to refrigerators, from televisions to computers, and from furnaces to water heaters. Energy Star products may cost more at the time of purchase, but owners will often have a considerable cost saving over the life of the product. Because of the certification process many Energy Star products are likely of higher quality. Remember when you reduce your household energy consumption, your utility bill will be smaller and you will be saving natural resources.

As many of the products we use in our modern world require electricity, the demand for electricity is increasing. Traditional methods of generating electricity, such a coal-fired or nuclear power plants, still produce the majority of electricity used in Tennessee and the United States. These methods have their benefits, but like all energy sources generate pollution and waste. New methods of generating electricity that have less negative environmental impacts are increasing being sought. The Tennessee Valley Authority has a Green Power Switch program to encourage the use of alternative energy sources. This program allows businesses and households to purchase green energy. Money from the program is reinvested into energy resources such as wind turbines, methane gas, and solar power.

Brownfields

Just because a property may be contaminated, does not mean it is useless. A brownfield is a property at which expansion, redevelopment, or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. It is estimated that there are more than 450,000 brownfields in the United States. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, utilizes existing infrastructure, reduces the need to develop undeveloped, open land, and both improves and protects the environment.

The EPA Brownfields Program has changed the way contaminated property is perceived, addressed, and managed. It was designed to prevent, assess, safely clean up, and reuse brownfields. Grants continue to serve as the foundation of EPA's Brownfields Program that has provided guidance and incentives to support economic revitalization and empowered communities to address the brownfields in their midst. EPA's Brownfield Program continues to look to the future by expanding the types of properties it addresses,

forming new partnerships, and undertaking new initiatives to help revitalize communities across the nation.

Additional Resources

Energy Star http://www.energystar.gov

Environmental Protection Agency Brownfields Cleanup and Redevelopment Homepage http://www.epa.gov/swerosps/bf

Environmental Protection Agency Sustainability Homepage http://www.epa.gov/sustainability

Tennessee Department of Environment and Conservation Tennessee Pollution Prevention Partnership (TP3) http://www.state.tn.us/environment/ea/tp3

Tennessee Valley Authority Green Power Switch http://www.tva.gov/greenpowerswitch